

April 2, 1996

Mr. Richard Gudz
Bureau of New Source Review
New Jersey Department of Environmental Protection
CN-027
401 East State Street
Trenton, NJ 08625-0027

SUBJ: Air Pollution Control Permit
Former Hexcel Corporation Facility
Lodi, New Jersey
APC Plant ID 01418
GEO Project No. 94039

Dear Mr. Gudz:

This letter is a follow-up to our recent telephone conversation regarding the subject air pollution control permit (APCP). We enclose a completed application for a revised permit to allow us to perform a pilot test of the existing system. We request your review of the application for the purpose of issuing a temporary pilot test permit, but we also request you refrain from issuing the temporary permit until such time as we notify you the pilot test will begin and the temporary permit is needed.

We expect the permit issued in response to the enclosed application will temporarily supersede the subject APCP. We understand the pilot test permit has a life of 90 days. We also understand the terms and conditions to be set in the pilot test permit will be solely operative during these 90 days and the terms and conditions established in the subject APCP will be temporarily waived.

Although the subject APCP has been in effect for over five years and the system to which it applies has been operable during this period, we anticipate a change in operating conditions which would not be consistent with the existing APCP's terms and conditions. The change in operating conditions includes a higher water flow rate and possibly a different mixture of contaminants fed to the system compared to current operating conditions. This change was discussed in more detail in our letter to Mr. Louis Mikolajczyk of your Bureau (December 19, 1995).

We have not yet defined the timing of the pilot test; therefore, we do not know what start date for the 90-day permit would be appropriate. At this time, we are attempting to get all of the approvals, permits, and authorizations necessary to perform the test. As noted in our previous correspondence, we still do not have final approval from the Passaic Valley Sewerage Commissioners (PVSC) for treated water discharge. If possible, we ask you to review the application and indicate approval or request additional information, if necessary, but withhold from issuing the pilot test permit until we can better define the pilot test schedule.



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We expect the requested pilot-test permit will allow operation of the treatment system in any manner acceptable to PVSC provided we comply with the terms and conditions of the pilot-test permit. You told us, generally, the only emission conditions are less than 0.5 lb/hr total volatile organic compounds (VOCs) and less than 0.1 lb/hr any toxic VOC (N.J.A.C. 7:27-17).

The emission rates from the system are anticipated to be well below the allowed limits. Based on the 1993 ground water quality data, the 1990 APCP-application assumptions for flow from the recovery wells, and the removal efficiency from the catalytic oxidizer (95%) as stated in the 1990 APCP application, the emission rates should be approximately 10% of the allowable total VOCs and the total toxic VOC emissions should be approximately 5% of the allowable individual toxic VOC emission rate. Table 1 summarizes the ground water quality expected to be fed to the system based on the 1993 sampling event results.

Table 1 Estimated Treatment System Feed Quality

Compound	Concentration (ug/1L)
Benzene	893
1,2 Dichloroethane	201
Methylene Chloride	65,670
Tetrachloroethene	6,742
Trichloroethene	11,082
Vinyl Chloride	1,129
Other*	65,340

^{*} Specific compounds listed in the table are expected to be present and are listed in the NJDEP risk assessment guide (Technical Manual 1003). "Other" includes expected compounds not listed in the guide such as 1,1 dichloroethane, 1,2 and 1,4 dichlorobenzenes, chlorobenzene, cis 1,2 dichloroethene, ethylbenzene, toluene, and 1,1,1 trichloroethane.

The 1993 ground water data are attached per your request (Sheet 3 of the application attachments). These data are for the seven ground water extraction wells currently equipped with operable withdrawal systems. The pilot test will use one or more of these wells. The final system design may not be restricted to this subset of the ground water recovery system, depending on the results of the test.

The anticipated flow rate to the system during the pilot test is not well defined. PVSC indicates our discharge rate is limited by the conveyance capacity of the sewer to which we will discharge. We cannot exceed 20 gpm without performing a conveyance capacity analysis. This analysis has not been performed nor do we anticipate that it will need to be for this pilot test.



The ground water treatment system that will be operational during the pilot test will be the same system currently operating. This system was described in more detail in the 1990 application for the APCP and summarized in the December 19, 1995 letter. The catalytic oxidizer used to reduce the hydrocarbon emissions will be operational during the pilot test.

We will evaluate the following issues during the pilot test:

- anticipated ground water flow rate to achieve the required control,
- the chemical composition of the ground water fed to the treatment system,
- the treatment efficiency of the system, and
- the removal efficiency of the catalytic oxidizer.

We will evaluate the efficiency of the catalytic oxidizer using a hand-held instrument such as a photo-ionization or flame-ionization detector. We understand NJDEP may allow the use of one of these detectors to monitor permit compliance instead of a hydrocarbon continuous emissions monitor.

Are there any other issues you can identify that we should evaluate during the pilot test to ensure a complete permit application? Will there be other conditions in a new or modified permit for which we should evaluate system performance during the pilot test?

If you have any questions regarding the application, especially concerning our request to delay issuance of the pilot plant permit until we are ready to run the test, please call either of us. We look forward to your favorable reply.

Sincerely,

GEO ENGINEERING, INC.

Jeffrey L. Duncan, P.E.

Senior Engineer

Marjone A. Piette Project Manager

JLD/MAP/III

Enclosure

cc:

Lisa M. Bromberg, Esq.

A. William Nosil

Joseph Nowak (w/o enclosures) James Higdon (w/o enclosures)

